

A NEW GENUS OF GALL-FORMING BRACHYSCELIDIPHAGINE PTEROMALIDAE
(HYMENOPTERA, CHALCIDOIDEA) FROM WESTERN AUSTRALIA.

By E. F. RIEK, Division of Entomology, C.S.I.R.O., Canberra, A.C.T.

(Five Text-figures.)

[Read 26th September, 1962.]

Synopsis.

Alysiaphagus picturatus, gen. et sp. nov., was reared from galls on *Alyxia buxifolia*.

Most Pteromalidae are parasites or hyperparasites, but the Brachyscelidiphagini have the unusual habit of forming galls on various plants or, in one case, of living in apiomorpha galls (*Brachyscelidiphaga*). The different genera of gall-formers are each more or less limited to one host plant genus. The Brachyscelidiphagini are best developed in Australia where there are about twenty genera. Many species form galls on *Eucalyptus* and *Acacia*, but there are also species attacking *Brachychiton*, *Casuarina*, *Callistemon*, *Syncarpia*, *Ficus* and possibly *Citriobatus*.

A new genus has been reared from galls on *Alyxia buxifolia*. Two species of the genus are known to form galls on this one host plant, but the material of the second species is inadequate for specific description. As is the case with the species of *Decatomothorax* which attack *Brachychiton*, the different species form distinctive galls on different parts of the plant.

Genus ALYXIAPHAGUS, gen. nov.

Genotype, *Alysiaphagus picturatus*, sp. nov.

Similar to *Encyrtoccephalus* and *Neorileyella* in having a relatively large pronotal collar and with a sharply angled bend in the submarginal vein, but the head not compressed or linear at vertex and the hind femur not expanded.

Head wider than high, but malar space a little more than half eye-length; vertex rather rounded above, not carinate even between the lateral ocelli; head with a distinct, though strongly sloping, post-ocular region so that the caudal margin of the eye does not protrude; hind femur not expanded, only as wide as fore femur, without an enlarged tooth; postmarginal vein well developed, as long as the stigmal; stigmal vein curved; antenna 13-segmented, with two ring segments; scutellum not produced over the metanotum.

ALYXIAPHAGUS PICTURATUS, sp. nov.

Female: Body dull red-brown, with gaster darker brown; legs similar but coxae, especially fore coxa, paler and tibiae, especially hind tibia, darker; hind coxa with a small white patch above; antenna with scape and pedicel pale, flagellum blackish but club white; ovipositor valves white except for extreme tip which is black; forewing deeply infuscated in a wide zone from the bend of the submarginal vein to the apex of the stigmal vein except for a small clear area below and bordering the marginal vein.

Length 3.0 mm.; head wider than high, vertex finely rugulose, lower face almost glabrous, mesal margin of eyes diverging below, lower margin of face transverse, malar space clearly somewhat more than half eye-length, malar groove distinct only at upper third; lateral ocelli slightly closer to eye than to median ocellus; scape long, not expanded, pedicel clearly longer than wide, two ring-segments, small, distinct, transverse, first funicle segment, after the ring-segments, quadrate, succeeding segments decreasing very slightly and widening very little, club three-segmented, not expanded, segments all short; funicle segments with distinct glume-like tubercles reaching almost to the apices of the segments; dorsal thorax rugulose, rather transversely so on scutum; pronotal collar distinct, relatively large but about five times as wide as long, caudal margin almost transverse; axillae slightly advanced beyond the caudal margin of the scutum, together forming a gently curved line; axillae almost touching at meson; with distinct large foveae between axillae and scutellum; rim at apex of scutellum

A NEW GENUS OF GALL-FORMING BRACHYSCELIDIPHAGINE PTEROMALIDAE
(HYMENOPTERA, CHALCIDOIDEA) FROM WESTERN AUSTRALIA.

By E. F. RIEK, Division of Entomology, C.S.I.R.O., Canberra, A.C.T.

(Five Text-figures.)

[Read 26th September, 1962.]

Synopsis.

Alysiaphagus picturatus, gen. et sp. nov., was reared from galls on *Alyxia buxifolia*.

Most Pteromalidae are parasites or hyperparasites, but the Brachyscelidiphagini have the unusual habit of forming galls on various plants or, in one case, of living in apiomorpha galls (*Brachyscelidiphaga*). The different genera of gall-formers are each more or less limited to one host plant genus. The Brachyscelidiphagini are best developed in Australia where there are about twenty genera. Many species form galls on *Eucalyptus* and *Acacia*, but there are also species attacking *Brachychiton*, *Casuarina*, *Callistemon*, *Syncarpia*, *Ficus* and possibly *Citriobatus*.

A new genus has been reared from galls on *Alyxia buxifolia*. Two species of the genus are known to form galls on this one host plant, but the material of the second species is inadequate for specific description. As is the case with the species of *Decatomothorax* which attack *Brachychiton*, the different species form distinctive galls on different parts of the plant.

Genus ALYXIAPHAGUS, gen. nov.

Genotype, *Alysiaphagus picturatus*, sp. nov.

Similar to *Encyrtoccephalus* and *Neorileyella* in having a relatively large pronotal collar and with a sharply angled bend in the submarginal vein, but the head not compressed or linear at vertex and the hind femur not expanded.

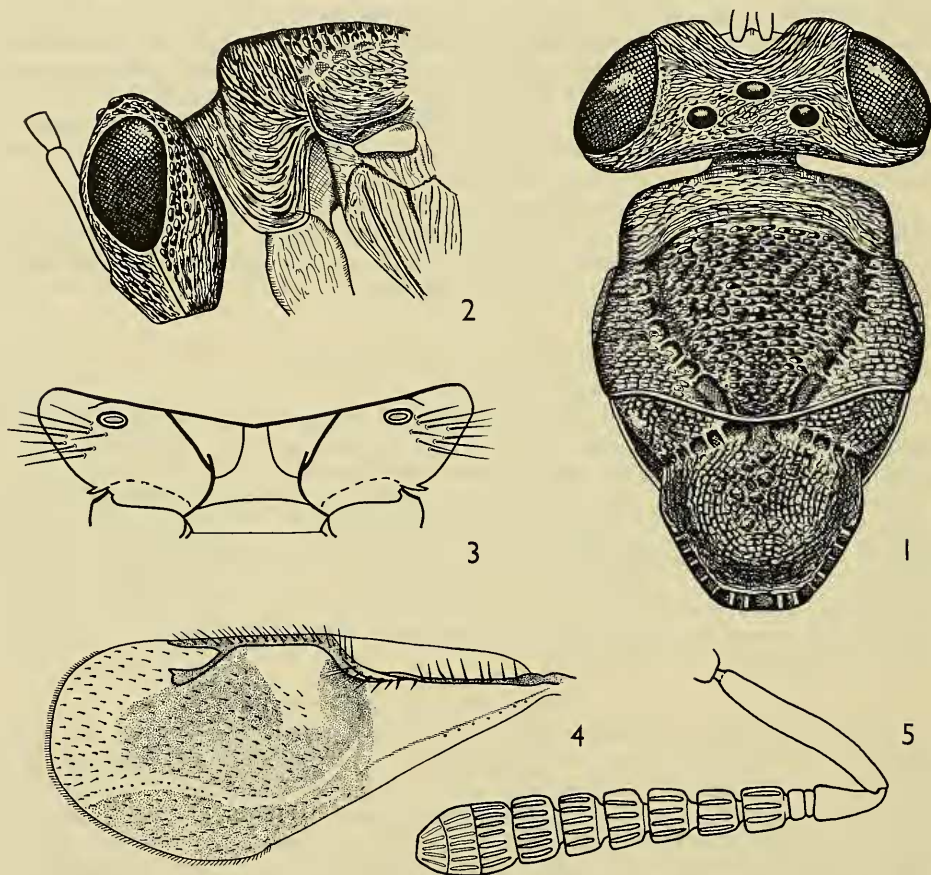
Head wider than high, but malar space a little more than half eye-length; vertex rather rounded above, not carinate even between the lateral ocelli; head with a distinct, though strongly sloping, post-ocular region so that the caudal margin of the eye does not protrude; hind femur not expanded, only as wide as fore femur, without an enlarged tooth; postmarginal vein well developed, as long as the stigmal; stigmal vein curved; antenna 13-segmented, with two ring segments; scutellum not produced over the metanotum.

ALYXIAPHAGUS PICTURATUS, sp. nov.

Female: Body dull red-brown, with gaster darker brown; legs similar but coxae, especially fore coxa, paler and tibiae, especially hind tibia, darker; hind coxa with a small white patch above; antenna with scape and pedicel pale, flagellum blackish but club white; ovipositor valves white except for extreme tip which is black; forewing deeply infuscated in a wide zone from the bend of the submarginal vein to the apex of the stigmal vein except for a small clear area below and bordering the marginal vein.

Length 3.0 mm.; head wider than high, vertex finely rugulose, lower face almost glabrous, mesal margin of eyes diverging below, lower margin of face transverse, malar space clearly somewhat more than half eye-length, malar groove distinct only at upper third; lateral ocelli slightly closer to eye than to median ocellus; scape long, not expanded, pedicel clearly longer than wide, two ring-segments, small, distinct, transverse, first funicle segment, after the ring-segments, quadrate, succeeding segments decreasing very slightly and widening very little, club three-segmented, not expanded, segments all short; funicle segments with distinct glume-like tubercles reaching almost to the apices of the segments; dorsal thorax rugulose, rather transversely so on scutum; pronotal collar distinct, relatively large but about five times as wide as long, caudal margin almost transverse; axillae slightly advanced beyond the caudal margin of the scutum, together forming a gently curved line; axillae almost touching at meson; with distinct large foveae between axillae and scutellum; rim at apex of scutellum

distinct, foveate above, extended only slightly over the metanotum; propodeum with a median pair of fine carinae, diverging very strongly in the middle to join the more distinct longitudinal, laterad carina; propodeum laterally with rather dense long hairs; lateral thorax mostly glabrous; gaster large, not laterally compressed; caudal margin of first three tergites of gaster clearly emarginate at meson, first tergite glabrous, second and third mostly so except antero-laterad, laterally with spaced long setae, succeeding segments with ornamentation and setae extending across meson, apical two segments very small, cerci of apical segment with five long setae, ovipositor valves slightly exerted, with short curved setae at apex; forewing with long setae along the venation,



Figures 1-5. *Alysiaphagus picturatus*.—1. Dorsal view of head and thorax, $\times 50$; 2, Lateral view of head and pronotum, $\times 50$; 3, Propodeum, $\times 50$; 4, Forewing, $\times 25$; 5, Antenna, $\times 80$.

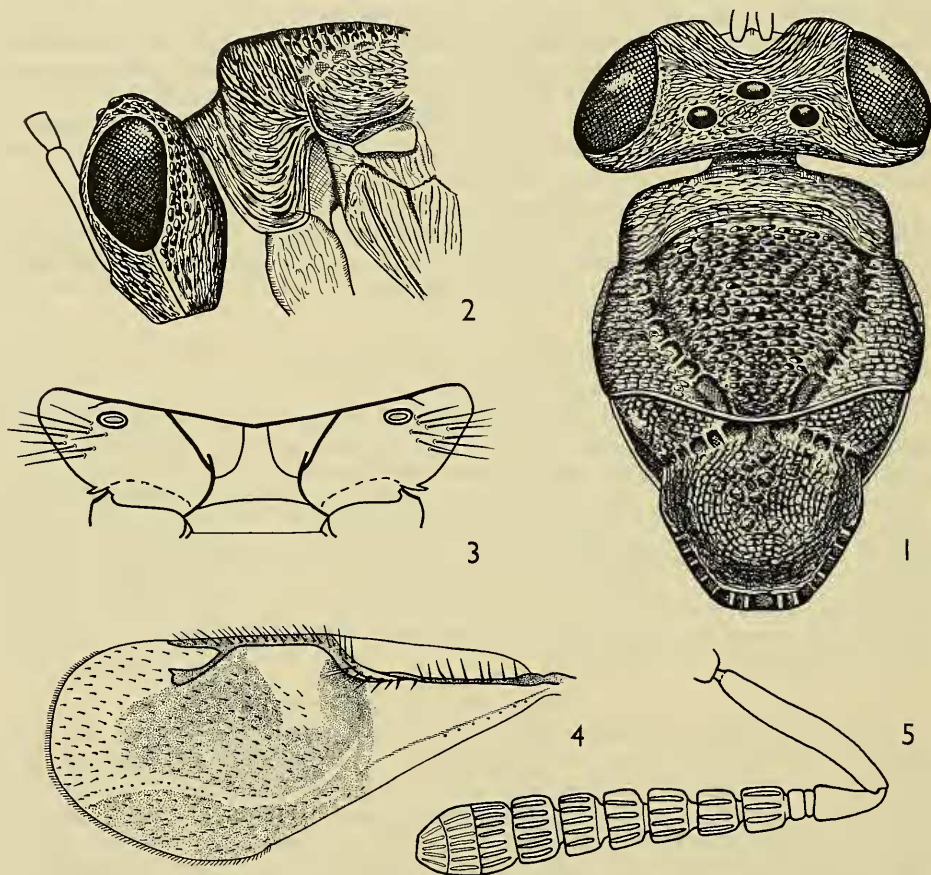
except stigmal vein; discal ciliation virtually limited to apical half of wing, absent, except for an upper row, between postmarginal and stigmal veins and almost so below the proximal two-thirds of the marginal vein; with a single row of cilia, on lower surface, in the anal groove.

Male: Similar to female, but abdomen small and forewing not as deeply infuscated; glume-like tubercles of antenna denser, particularly on more basad segments; club not as clearly white as in female. Length little more than 2.0 mm.

Types: Holotype ♀, allotype ♂ and paratype ♀♀ in the Western Australian Museum. Paratype ♂, ♀♀ in the Australian National Insect Collection, C.S.I.R.O. Division of Entomology Museum.

Type Locality: Pt. Peron, W.A. (May, 1959, L. N. McKenna), 17 specimens reared from galls on *Alyxia buxifolia*.

distinct, foveate above, extended only slightly over the metanotum; propodeum with a median pair of fine carinae, diverging very strongly in the middle to join the more distinct longitudinal, laterad carina; propodeum laterally with rather dense long hairs; lateral thorax mostly glabrous; gaster large, not laterally compressed; caudal margin of first three tergites of gaster clearly emarginate at meson, first tergite glabrous, second and third mostly so except antero-laterad, laterally with spaced long setae, succeeding segments with ornamentation and setae extending across meson, apical two segments very small, cerci of apical segment with five long setae, ovipositor valves slightly exerted, with short curved setae at apex; forewing with long setae along the venation,



Figures 1-5. *Alysiaphagus picturatus*.—1. Dorsal view of head and thorax, $\times 50$; 2. Lateral view of head and pronotum, $\times 50$; 3. Propodeum, $\times 50$; 4. Forewing, $\times 25$; 5. Antenna, $\times 80$.

except stigmal vein; discal ciliation virtually limited to apical half of wing, absent, except for an upper row, between postmarginal and stigmal veins and almost so below the proximal two-thirds of the marginal vein; with a single row of cilia, on lower surface, in the anal groove.

Male: Similar to female, but abdomen small and forewing not as deeply infuscated; glume-like tubercles of antenna denser, particularly on more basad segments; club not as clearly white as in female. Length little more than 2.0 mm.

Types: Holotype ♀, allotype ♂ and paratype ♀♀ in the Western Australian Museum. Paratype ♂, ♀♀ in the Australian National Insect Collection, C.S.I.R.O. Division of Entomology Museum.

Type Locality: Pt. Peron, W.A. (May, 1959, L. N. McKenna), 17 specimens reared from galls on *Alyxia buxifolia*.